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40987	7590 02/14/2005		EXAMINER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

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		Applic	ation No.	Applicant(s)			
Office Action Summary		09/88	5,705	BOUGHANNAM, AKRAM			
		Exami	ner	Art Unit			
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Period for	The MAILING DATE of this commun	ication appears on	the cover sheet with the	correspondence addre	ss		
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Status							
1)⊠ R	esponsive to communication(s) file	ed on <u>28 Octobe</u> r 2	<u>2004</u> .				
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3)□ S	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositio	n of Claims						
4a 5)□ C 6)⊠ C 7)□ C	claim(s) <u>1-21</u> is/are pending in the analysis of the above claim(s) is/are allowed. claim(s) <u>1-21</u> is/are allowed. claim(s) <u>1-21</u> is/are rejected. claim(s) is/are objected to. claim(s) are subject to restrict	re withdrawn from					
Application	n Papers						
10)□ Tr A R	ne specification is objected to by the drawing(s) filed on is/are pplicant may not request that any objected to a content drawing sheet(s) including the oath or declaration is objected to	a) accepted on accepted on accepted on accepted on accepted on the drawing at the correction is reconstruction.	s) be held in abeyance. Se quired if the drawing(s) is ol	ee 37 CFR 1.85(a). ojected to. See 37 CFR			
Priority un	der 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some col None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s							
2) Notice of 3) Informa	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (Fition Disclosure Statement(s) (PTO-1449 or Io(s)/Mail Date		4) Interview Summan Paper No(s)/Mail D 5) Notice of Informal 6) Other:		j 2)		
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DETAILED ACTION

1. This action is responsive to the amendment filed on 10/28/2004.

This action is made Final.

2. In the amendment, claims 1-21 are pending in the case. Claims 1, 7, 11, 14, and 16 are independent claims.

Drawings

3. The drawings filed on 6/20/2001 have been approved by the examiner.

Claim Objections

4. The objections of claims 1-6, and 16-21 have been withdrawn as necessitated by the amendment.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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6. Claim 11 remains rejected under 35 U.S.C. 102(e) as being anticipated by Anthony et al, hereinafter Anthony (US Pub.# 2003/0069908 A1, 4/10/2003, provisional filed on 1/27/2000).

Regarding independent claim 11, Anthony discloses translating a first XML document into a catalog model using a translator—state machine modeling tool--. The model is made up of class names in squares, instances of classes in circles—state chart names, and transition data—, solid, and dotted arrow lines—composite state actions (0366-0367, fig.20).

Moreover, Anthony discloses translating the model into a second XML document (0365-0367, fig. 20). Thereby, parsing and translating classes, instances, and arrows into the second XML document—parsing state actions into component state actions, formatting said state chart data and component state actions according to selected markup language.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 1-3, 5-6, 16-18, and 20-21 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Anthony, in view of Daugherty et al, hereinafter Daugherty (US Pub. #2002/0016828 A1, 2/7/2002, filed on 12/3/1998).

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Regarding independent claim 1, Anthony discloses using a model viewer's interface for viewing items belonging to a given concept--state data corresponding to a state chart diagram-(0062-0063, fig.3).

Moreover, Anthony teaches translating a first document written in an XML format to a second XML format, such as document in fig.19, which has a tag describing the version—"<?xml version="1.0?" (0353-0356, 0366).Anthony fails to explicitly disclose *generating header and footer data in accordance with a selected markup*. However, Daugherty teaches an XML file describing a provider header, and footer (0045). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Anthony, and Daugherty, because Daugherty teaches above XML descriptions for maximizing the cacheability of a web page stock data. Thus, enabling a user to quickly retrieve the web page.

Moreover, Anthony teaches the translation — retrieval to translate--by a system of classes names as squares, and instances of a class as circles--state name and state transition data-- in a clothing model (0365-03667, fig.20).

Moreover, Anthony teaches the translation of a first XML document model into a second XML document—formatting and saving retrieved state name and transition according to XML (0366-0367, fig.20).

Regarding claim 2, which depends on claim 1, Anthony teaches the translation of a first XML document into a catalog model. The translation into a second XML document (0366-0367, fig.20).

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Regarding claim 3, which depends on claim 1, Anthony teaches the translation of a first XML document model into a second XML document (0366-0367, fig.20).

Regarding claim 5, which depends on claim 3, Anthony teaches a DTD defining structure of an XML document (0355-0363).

Regarding claim 6, which depends on claim 5, Anthony teaches the translation of a first XML document model into a second XML document using a second DTD (0364-0367, fig.20).

Claims 16-18, and 20-21 are directed towards a program for performing the steps found in claims 1-3, and 5-6 respectively, and therefore are similarly rejected.

9. Claims 4, and 19 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Anthony, in view of Daugherty, and further in view of "Understanding UML The Developer's Guide with a Web-Based Application in Java", Harmon et al, hereinafter UML, Morgan Kaufmann Publishers, Inc., 1998, pp.214-253.

Regarding claim 4, which depends on claim 1, Anthony discloses generating a model of a first XML document (0365-0367, and fig.20). Anthony fails to explicitly disclose said state chart diagram is a unified modeling (UML) state chart. However, UML teaches the creation of state diagrams using UML (page222-224, fig.12.1, 12.3-5). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Anthony, Daugherty, and UML, because UML discloses using state diagrams for specifically showing how objects change state

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as messages are received and processed (page 215, lines 7-12). Thus enabling a user to quickly identify a specific state of an XML document.

Claim 19 is directed towards a program for performing the steps found in claim 4, and therefore is similarly rejected.

10. Claims 7-8, and 10 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Anthony, in view of "Laura Lemay's Web Workshop JavaScript", Lemay et al, hereinafter Javascript, Sams, 1996, pp.7-9.

Regarding independent claim 7, Anthony discloses generating a model of a first XML document—generating state chart data—using a translator for translating the model into a second XML document—formatting state chart data according to a selected markup language (0365-0367, and fig.20). Anthony fails to explicitly disclose an add-in script for formatting said state chart data. However, Javascript teaches the combining a Javascript program with HTML for performing certain functions (page 6, lines 9-page 7, line 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Anthony, and Javascript, because Javascript discloses using a relaxed program environment, which makes it easier on the programmer writing the program (page 7, lines 4-17).

Regarding claim 8, which depends on claim 7, Anthony teaches the translation of a first XML document model into a second XML document (0366-0367, fig.20).

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Regarding claim 10, which depends on claim 8, Anthony teaches a DTD defining structure of the translated or formatted XML document (0355-0363).

11. Claims 9, and 14-15 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Anthony, in view of Javascript, and further in view of UML.

Regarding claim 9, which depends on claim 8, Anthony discloses generating a model of a first XML document (0365-0367, and fig.20). Anthony fails to explicitly disclose *said* generated state chart diagram is a unified modeling (UML) state chart data. However, UML teaches the creation of state diagrams using UML (page222-224, fig.12.1, 12.3-5). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Anthony, Javascript, and UML, because UML discloses using state diagrams for specifically showing how objects change state as messages are received and processed (page 215, lines 7-12). Thus enabling a user to quickly identify a specific state of an XML document.

Regarding independent claim 14, Anthony discloses generating a model of a first XML document using a modeling system (0365-0367, and fig.20). Anthony fails to explicitly disclose said modeling tool producing a unified modeling (UML) specified state chart diagrams.

However, UML teaches the creation of state diagrams using UML (page222-224, fig.12.1, 12.3-5). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Anthony, and UML, because UML discloses using state diagrams for specifically showing how objects change state as messages are received and processed (page 215, lines 7-12). Thus enabling a user to quickly identify a specific state of an XML document.

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Moreover, Anthony fails to explicitly disclose an add-in script defining markup representations of said UML specified state chart diagrams. However, Javascript teaches the combining a Javascript program with HTML for performing certain functions (page 6, lines 9-page 7, line 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Anthony, and Javascript, because Javascript discloses using a relaxed program environment, which makes it easier on the programmer writing the program (page 7, lines 4-17).

Furthermore, Anthony fails to explicitly disclose a state machine run-time engine executing said markup language representations. However, Javascript teaches using browser for including Javascript objects in an HTML web page (page 6-page 7, lines 3, 18-33). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Anthony, and Javascript, because Javascript discloses using a relaxed program environment, which makes it easier on the programmer writing the program (page 7, lines 4-17).

Regarding claim 15, which depends on claim 14, Anthony discloses generating a model of a first XML document into a second XML document (0365-0367, and fig.20). Anthony fails to explicitly disclose said markup language representations are XML representation of said UML specified state chart diagrams. However, UML teaches the creation of state diagrams using UML (page222-224, fig.12.1, 12.3-5). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Anthony, Javascript, and UML, because UML discloses using state diagrams for specifically showing how objects change state as messages are

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received and processed (page 215, lines 7-12). Thus enabling a user to quickly identify a specific state of an XML document.

12. Claim 12 remains and claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anthony, in view of UML.

Regarding claim 12, which depends on claim 11, Anthony discloses generating a model of a first XML document using a modeling system (0365-0367, and fig.20). Anthony fails to explicitly disclose said generated state chart diagram is a unified modeling (UML) specified state chart diagram. However, UML teaches the creation of state diagrams using UML (page222-224, fig.12.1, 12.3-5). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Anthony, and UML, because UML discloses using state diagrams for specifically showing how objects change state as messages are received and processed (page 215, lines 7-12). Thus enabling a user to quickly identify a specific state of an XML document.

Regarding claim 13, which depends on claim 12, Anthony teaches the translation of a first XML document model into a second XML document (0366-0367, fig.20).

Response to Arguments

13. Applicant's arguments filed 10/28/2004 have been fully considered but they are not persuasive. Regarding claim 11, Applicants submit that Anthony is silent regarding state

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chart diagrams (page 10, lines 1-12). The Examiner disagrees, because Anthony teaches the generation of an XML diagram describing class names, such as clothing, instances, solid and dotted arrow lines. In other words, Anthony discloses a diagram with various categories, levels or *states* of clothing products (0364, 0367). Let's take the career line of clothing, which subdivided into coats, sweaters, dresses, etc.,--state chart names. Classes, such as the coat class (shown in squares, fig. 20) turn into a different product, when certain attributes are present, such as wool, cashmere, etc. So the way that a coat becomes—transitions— a Wool overcoat is because certain attributes, such as wool,--transition data— (shown in circles, fig. 20) are present within in it. In other words, the coat is transitioning into a wool overcoat, because of the addition of certain attributes. The solid and dotted lines represent connections between two or more classes and/or attributes—composite state actions.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "Anthony is silent in regard to state chart diagrams or to modeling the behavior or lifecycle of a software system" page 10, lines 1-2.) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "The translator of Anthony is a structure-modeling tool (structural) that is different from Applicants claimed state modeling tool (behavioral or process flow) " page 11, lines 1-4.) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations

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from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that the teachings of Anthony is nonanalogous art (page 11, lines 6-14), it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Anthony is analogous to the claimed invention, because Anthony teaches the modeling of XML documents into diagrams showing categories—*states*—for several articles of clothing.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "The translator of Anthony is a structure-modeling tool (structural) that is different from Applicants claimed state modeling tool (behavioral or process flow) " page 11, lines 1-4.) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "By definition, a state chart names represent one or more processing flow states that an object can have....Transition data can include events, conditions, and actions associated with a state chart name. Transition can cause a particular event to fire when the processing flow state changes" page 11, lines 1-4.) are not recited in the rejected claim(s). Although the claims are interpreted

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in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The limitation defined above is not part of the claim. The Examiner is broadly interpreting the state chart diagram as being taught by Anthony's diagram model class/subclass categories (0367, fig.20). The definition of state in the art is defined as a level or category, such as on and off states, 1 or 0 binary states, etc.

Anthony teaches the states or categories of XML code by representing such code as a model of classes, subclasses, and their relationships. This interpretation is a broad, but reasonable interpretation in light of the broad claims before the Examiner.

Moreover, Applicants state that Anthony fails to teach the parsing of composite actions into component actions (page 12, lines 11-16). The Examiner disagrees with this assessment of the teachings of Anthony, because Anthony teaches the translation of XML code, having tags describing items and their property, such as "fabric" attribute, and "wool" value (0359, fig.20, 2011, 2015). The description of these items—action—as represented by the XML tags, composed of multiple items—composite state actions—is parsed and translated into a model representing descriptions—actions—for each of the components in the model—component state actions—such as coats with wool attributes serving as "wool overcoats".

Moreover, Applicants state that Anthony fails to contemplate performing operations against state chart data, a state chart diagram, a state machine modeling tool, or state transition data (page 15, lines 3-6). The Examiner disagrees, because as explained above, Anthony teaches the translation or generation— a state machine modeling tool— of an XML diagram— a state chart diagram— describing various categories, levels or states of clothing products (0364, 0367). Let's take the career line of clothing, which subdivided into coats, sweaters, dresses, etc.,—state

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chart data. Classes, such as the coat class (shown in squares, fig. 20) turn into a different product, when certain attributes are present, such as wool, cashmere, etc. So the way that a coat becomes—transitions— a Wool overcoat is because certain attributes, such as wool,—a state transition data— (shown in circles, fig. 20) are present within in it. In other words, the coat is transitioning into a wool overcoat, because of the addition of certain attributes. The solid and dotted lines represent connections between two or more classes and/or attributes—composite state actions.

Regarding claims 1, and 16, and in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "generate a document (a state diagram) formatted for a selected markup language from state data automatically extracted from a state machine modeling tool" page 15, lines 5-9.) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). There is no automatic extraction of state data in the claims.

Regarding claims 7-10, and 14-15, Applicants note that Anthony, Daughty, Harmon,
Lemay and any combinations thereof fail to teach or suggest performing operations against state
chart data, a state chart diagram, a state machine modeling tool, or state transition data (page 15,
lines 3-6). Applicants are directed towards the explanations above concerning Anthony's
teaching of these limitations.

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Regarding claims 4-9, and in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "the claims explicitly perform a translation from a UML model in a modeling tool to an XML representation" page 16, lines 6-9.) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The claims only recite the generation of the state chart in the UML format. There is no translation from another format to UML or viceversa.

Regarding claim 7, and in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "This claim is novel based upon the logic inherent in the script for accessing state chart data from a UML state machine model that is not taught or suggested by Anthony, Lemay" page 16, lines 6-9.) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The claim only recites the addin script for formatting for formatting state data into a markup language. Anthony fails to explicitly disclose *an add-in script for formatting said state chart data*. However, Javascript teaches the combining a Javascript program with HTML for performing certain functions (page 6, lines 9-page 7, line 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Anthony, and Javascript, because Javascript discloses using a

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relaxed program environment, which makes it easier on the programmer writing the program (page 7, lines 4-17), such as the translation program taught by Anthony.

Finally, as explained above, Anthony teaches the translation or generation-- a state machine modeling tool-- of an XML diagram-- a state chart diagram-- describing various categories, levels or states of clothing products (0364, 0367). Let's take the career line of clothing, which subdivided into coats, sweaters, dresses, etc.,--state chart data. Classes, such as the coat class (shown in squares, fig. 20) turn into a different product, when certain attributes are present, such as wool, cashmere, etc. So the way that a coat becomes—transitions-- a Wool overcoat is because certain attributes, such as wool,--a state transition data-- (shown in circles, fig. 20) are present within in it. In other words, the coat is transitioning into a wool overcoat, because of the addition of certain attributes. The solid and dotted lines represent connections between two or more classes and/or attributes—composite state actions. Although, this is a broad interpretation, is nevertheless a reasonable one in light of the breadth of the claims before the Examiner.

Conclusion

14. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

- I. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Charisius et al. (Pat. # 2002/0032900).
- II. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cesar B. Paula whose telephone number is (571) 272-4128. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:00 p.m. (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong, can be reached on (571) 272-4124. However, in such a case, please allow at least one business day.

Any response to this Action should be mailed to:

Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

Or faxed to:

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• (703) 703-872-9306, (for all Formal communications intended for entry)

2/10/05

CESAR B PAULA PRIMARY EXAMINER AU 2178